

Work Order ID 153262

Tuesday, November 15, 2016 11:17:46 AM

153262

PRELIMINARY ISSUE

Page 1

Item ID: 647.7352 Accept *N900040100* Setup Start *NS1*
 Revision ID: POSITIVE RECALL Stop *NS2*
 Item Name: Skid Deflector Assembly
 Start Date: 12/8/2016 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 12/8/2016 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100 *100* DC Doc.Control -USB or Paperwork	Document Control DOCUMENT CONTROL Memo Photocopy bluefile & type labels per PPP 647.7352	0.00							
110 *110* Packaging Packaging	Pick Kit Memo	0.00							
120 *120* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00							

SHIB DEC 28TH

ICA13521
MPP-195

Rev. 12.16

DAS 6 9-89

DEC 16 2016

DAS 21 9-89

16-12-16

DAS 27 9-89

DAS 7 9-89

DEC 19 2016

DAS 6 9-89

NOV 28 2016

DAS 28 9-89

DAS 27 9-89

DEC 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 153262

Tuesday, November 15, 2016 11:17:46 AM

153262

Page 2

Item ID: 647.7352 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Skid Deflector Assembly
Start Date: 12/8/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 12/8/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 647.7352 Location : FG109								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

DAS
27
9-89

DEC 19 2016

DAS
21
9-89

DEC 19 2016

DEC 19 2016

POSITIVE RECALL

EFFECTIVE 16-11-17 AUTH

RELEASED DATE

R46-1006-01

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, November 15, 2016 11:17:45 AM

Page 1

Work Order ID: 153262

153262

Parent Item: 647.7352

647 7352

Parent Item Name: Skid Deflector Assembly

Start Date: 12/8/2016

Required Date: 12/8/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 16.09.28 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.1702 *647 1702* Skid Deflector Assembly LN9025-0820K		Manufactured	No				Each	0.0000	**	2	153187	DEC 1 8 2016	DAS 28 9-89
I N9025-0820K Lock Tab Washer LN9037-08018		Purchased	No				Each	0.0000	**	8	136211	NOV 7 8 2016	DAS 28 9-89
I N9037-08018 Screw		Purchased	No				Each	0.0000	**	8	136189	NOV 7 8 2016	DAS 28 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								



SUBJECT:
Manufacturing Process Procedure
EC-135 CCK Configuration Management

DOCUMENT NO:
MPP-195
Rev. N/C
12/15/16

Table 16: T1/P1 Skid Deflector (SD) Assembly, 647.7351

FIND #	PART #	DESCRIPTION	QTY
3	647.1701	SKID DEFLECTOR ASSY	2
33	647.2510	SLEEVE	4
34	647.2511	NUT	4
51	601.3002	BOLT	4
54	601.3209	LOCKNUT	4
95	601.1097	WASHER	8

Table 17: T2/P2/T3/P3 SD Assembly, 647.7352

FIND #	PART #	DESCRIPTION	QTY
105	647.1702	SKID DEFLECTOR ASSY	2
106	601.3655	LOCK WASHER	8
107	601.3654	BOLT	8

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 15362
15362

DEC 16 2016

Work Order ID 153262

Friday, December 16, 2016 10:20:09 AM

153262

Page 1

Item ID: 647.7352

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: EC135 T2/P2/T3/P3 Skid Deflector Assembly

Start Date: 12/8/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 12/8/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run Start *NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

MPP-195

REV N/C

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP 647.7352

DAS
21
9-89

DEC 16 2016

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

Marie Lajeunesse

From: Kim Johnston
Sent: Friday, December 16, 2016 9:51 AM
To: Marie Lajeunesse
Subject: FW: EC135 CCK MPP & IIN corrections

Thanks,

Kim Johnston
*Engineering Clerk
Document Administrator*

DART AEROSPACE
T 1 613 632-5200 > ext. 226
F 1 613 632-9311



From: Sian Willems
Sent: Monday, December 12, 2016 9:21 AM
To: Lisa McMachen <lmcmachen@dartaero.com>; Kim Johnston <kjohnston@dartaero.com>
Subject: RE: EC135 CCK MPP & IIN corrections

Go ahead and load. A corrected version will follow once DaveM makes the updates.

SIAN WILLEMS
Customer Support Manager

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F +1-613-632-5146
+1-800-556-4166
www.dartaerospace.com

From: Lisa McMachen
Sent: Monday, December 12, 2016 8:26 AM
To: Kim Johnston <kjohnston@dartaero.com>; Sian Willems <swillems@dartaero.com>
Subject: FW: EC135 CCK MPP & IIN corrections

Hi Sian,
Kim says that the paperwork is not jiving...can we load the attached documents to the website as discussed on Friday? Please see the attached email.

Thanks,
Lisa McMachen

From: Sian Willems
Sent: Monday, December 12, 2016 7:21 AM



SUBJECT:
Manufacturing Process Procedure
EC-135 CCK Configuration Management

DOCUMENT NO:
MPP-195
Rev. N/C
12/15/16

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FIND #	PART #	DESCRIPTION	QTY
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LN9025 0820K
LN9037- 08018